

REMARKS

Favorable reconsideration of this application, as presently amended and in light of the following discussion, is respectfully requested.

Claims 1-4, 6, and 9-17 remain pending in the present application, Claims 1-4, 6, and 9-16 having been amended, Claims 5 and 7-8 having been canceled without prejudice or disclaimer. Applicants respectfully submit that no new matter is added.¹

In the outstanding Office Action, Claims 1-17 were rejected under 35 U.S.C. § 103(a) as unpatentable over Rosenberg et al. (U.S. Patent Application Publication No. 2001/0035854 A1, hereinafter "Rosenberg") in view of Toki (U.S. Patent No. 5,856,956).

In light of the outstanding rejection, independent Claims 1 and 14 have been amended to clarify the claimed invention and to thereby more clearly patentably define over the applied references.

Amended Claim 1 recites an input device, including, in part,

a plurality of tapered projections constructed to contact
a face of the touch panel closest to the support frame and to
contact the vibration generation device; [and]

a touch panel support member constructed to contact
the touch panel and the support frame and to extend farther
from the touch panel to the support frame than a face of the
vibration generation device farthest from the touch panel
extends to the support frame

Applicants respectfully submit that Rosenberg and Toki fail to disclose or suggest these features.

Rosenberg shows in Figure 5 an embodiment in which "An actuator 54 is . . . coupled to the touchpad 16 to impart forces on the touchpad and cause the touchpad 16 to move along

¹ The amendments to Claims 1 and 14 find support at least in Claim 8 and in Figures 5B and 13 and in their accompanying text in the specification. The amendment to Claim 4 finds support at least in the paragraph bridging pages 33 and 34 of the specification.

the z-axis.”² In that Rosenberg embodiment, a “moving portion (bobbin) of the actuator is directly coupled to the touchpad 16.”³

Rosenberg is silent with regard to a shape of the bobbin. Applicants respectfully submit that Rosenberg fails to disclose or suggest in the Figure 5 embodiment “a plurality of tapered projections,” as recited in amended Claim 1.

Further to that embodiment of Rosenberg, “The actuator 54 is grounded to the computer 10 housing and outputs a linear force on the touchpad 16 and thus drives the touchpad along the z-axis.”⁴ Thus, in Rosenberg, the actuator is grounded to the housing. Applicants respectfully submit that Rosenberg embodiment is silent regarding “a touch panel support member constructed . . . to extend farther from the touch panel to the support frame than a face of the vibration generation device farthest from the touch panel extends to the support frame,” as recited in amended Claim 1.

Further, Rosenberg shows in Figure 6 an embodiment in which “the stationary portion of the actuator is coupled to the touchpad 16, and the moving portion of the actuator is coupled to an inertial mass to provide inertial haptic sensations.”⁵ Applicants respectfully submit that the Figure 6 embodiment of Rosenberg fails to disclose or suggest “a plurality of tapered projections constructed to contact a face of the touch panel closest to the support frame and to contact the vibration generation device,” as recited in amended Claim 1.

Turning to Figures 8a and 8b of Rosenberg, those figures show an embodiment in which “the actuators 86 are directly coupled to the touch screen 82 . . .”⁶ Applicants respectfully submit that Rosenberg fails to show in Figures 8a and 8b “a plurality of tapered projections constructed to contact a face of the touch panel closest to the support frame and to contact the vibration generation device,” as recited in amended Claim 1.

² Rosenberg, para. [0044].

³ Id.

⁴ Id.

⁵ Id., para. [0048].

⁶ Id., para. [0075].

Further to the embodiment of Figure 8 of Rosenberg, a “touch screen 82 is preferably coupled to the housing 88 of the device 80 by one or more spring or compliant elements 90, such as helical springs, leaf springs, flexures, or compliant material (foam, rubber, etc.).”⁷

Although Rosenberg describes a coupling of the touch screen, Applicants submit that Figures 8a and 8b of Rosenberg are silent with regard to the coupling of the actuators. Applicants therefore submit that Rosenberg embodiment is silent regarding “a touch panel support member constructed . . . to extend farther from the touch panel to the support frame than a face of the vibration generation device farthest from the touch panel extends to the support frame,” as recited in amended Claim 1.

Turning to Toki, that reference concerns a piezoelectric acoustic transmitter. Applicants respectfully submit that Toki is silent with regard to the presently clarified features of “a plurality of tapered projections constructed to contact a face of the touch panel closest to the support frame and to contact the vibration generation device,” or “a touch panel support member constructed . . . to extend farther from the touch panel to the support frame than a face of the vibration generation device farthest from the touch panel extends to the support frame,” as recited in amended Claim 1.

Thus, Rosenberg and Toki, taken alone or in combination, fail to disclose or suggest “a plurality of tapered projections constructed to contact a face of the touch panel closest to the support frame and to contact the vibration generation device,” and “a touch panel support member constructed . . . to extend farther from the touch panel to the support frame than a face of the vibration generation device farthest from the touch panel extends to the support frame,” as recited in amended Claim 1. It is respectfully submitted that independent Claim 1 (and all associated dependent claims) patentably distinguishes over Rosenberg and Toki.

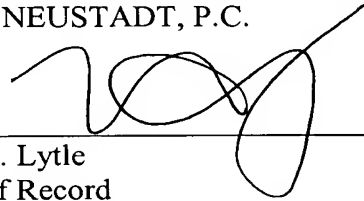
⁷ Id.

Applicants also submit that amended Claim 14 (and all associated dependent claims) is allowable for the same reasons as discussed above with regard to Claim 1 and for the more detailed features presented in Claim 14.

Consequently, in light of the above discussion and in view of the present amendment, the present application is believed to be in condition for allowance. An early and favorable action to that effect is respectfully requested.

Respectfully submitted,

OBLON, SPIVAK, McCLELLAND,
MAIER & NEUSTADT, P.C.

A handwritten signature in black ink, appearing to be 'B. Lytle', written over a horizontal line.

Bradley D. Lytle
Attorney of Record
Registration No. 40,073

Customer Number
22850

Tel: (703) 413-3000
Fax: (703) 413-2220
(OSMMN 06/04)

Brian R. Epstein
Registration No. 60,329